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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,313	02/24/2000	Tohru Hotta	Q57991	5777

7590

11/21/2002

Sughrue Mion Zinn MacPeak & Seas PLLC
2100 Pennsylvania Ave NW
Washington, DC 20037

EXAMINER

NGUYEN, TUAN N

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/512,313

Applicant(s)

HOTTA ET AL.

Examiner

Tuan N Nguyen

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 28, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In respond to applicant's amendment filed October 28, 2002, claims 4, 8, and 9 have been amended, and claims 13 and 14 have been added. The abstract section has been amended and claims 1-14 are pending.

2. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of new ground(s) of rejection.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09512313, filed on February 24, 2000.

Drawings

4. Acknowledge the formal drawings were received on May 24, 2000.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 4, 8, 10 are rejected under 35 U.S.C 112, second paragraph, as being indefinite, vague, and confusing for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, and 10 claim an optical pickup apparatus comprising: " a laser light emitting device; a deflector; a lens driver for moving an objective lens; a frame member for supporting laser light emitting device, the deflector and lens driver ...". There is no

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means, structure and functional relationship to adjust the deflector, which is the main point of the invention, which render the claims vague and indefinite. Claims 2,3,7, 13, 11-12, and 14 are rejected base on the same reason.

Claims 4, and 8 recites a method of manufacturing an optical pickup apparatus, comprising the steps of: "providing a laser light device..., providing a deflector ..., providing an objective lens ..., *adjusting the deflection angle such that...*, *moving the deflector in a direction parallel...*". There is no means, structure and functional relation to adjusting and moving the deflector, which is the main point of the invention, which render the claims vague and indefinite. Claims 5, 6, and 9 are rejected base on the same reason.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or non-obviousness.

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8. Claims 1-3, 7, 13, 10-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable Mochizuki et al. (US 6097690), further in view of Malin et al. (US 5377001).

With respect to claims 1, 4, 8, 10, and 12, Mochizuki et al. ('690) shows in figures 3, 19 and its discussion section – an optical pickup apparatus comprising: a laser light emitting device (fig 19: 32, 32a); a deflector for deflecting laser light emitted from the laser light (fig 19: 30, 34); a lens driver (fig 3: 2) for moving objective lens (fig 3: 4,5) for conversing the laser light deflected by the deflector onto an optical recording disk in a focusing direction and a tracking direction thereof (col 1-2: 55-15); a frame member for supporting the laser light emitting device, deflector and lens driver (fig 1,3: 1); wherein deflector is position such that the center of the intensity distribution of the laser light is aligned with the optical axis of the objective lens (fig 19: 4,5,30,34). However, Mochizuki et al. did not disclose the deflector is connected with an arm and control by an adjuster in aligning the light. Malin et al. ('001) discloses an apparatus for surface defect, and contamination inspection, light source, objective lens, an adjustable deflection system, where light reflected by the surface and collected by the detector. Malin et al. shows the reflective mirror connected to a swivel arm and secure to a mechanical arm to permit adjustment of the beam by displacement or rotation relative to the optical axis (fig 4a: 34, 62, 64, 60 and col. 6: 3-7) and columns 13-14 (#50-33) disclose the optical axis of the objective lens is aligned with the center of the intensity distribution of the laser light. It would have been obvious to one of ordinary skill in the art to provide Mochizuki et al. ('690) with the adjustable deflection system as taught or suggested by Malin et al. ('001), for the benefit of aligning the laser light. Since claims 4, and 8 recites the same or

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identical elements/limitations it is inherent to use patents ('690) and ('001) to recite the method of manufacturing optical pickup apparatus, product by process.

With respect to claims 2, 5, 6, 9 and 11 Mochizuki et al. ('690) shows in figures (6: 30, 19: 30, 34) the optical pickup apparatus wherein the diverging angle in a direction perpendicular to the optical axis of the emitted laser light from the laser emitting device becomes the narrowest is aligned with the radial direction of the optical recording disk.

With respect to claims 3, 7 Malin et al. shows in figures 4a: 60, 64 and Mochizuki shows in figure 19: 32, 32a - frame member includes base member on which the deflector is mounted, which movable in direction parallel with the optical axis of the laser light; wherein the optical axis of the laser light is aligned with the tracking direction when viewed from a direction parallel with the optical axis of the objective lens.

With respect to claims 13, and 14 Mochizuki et al. ('690) discloses in the abstract an optical pick-up including plural object lens so that write and read operations of information signals can be carried out with respect to plural kinds of discs.

Citation of Pertinent References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is cited primarily to show the product of the instant invention.

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Kobayashi (US005353073A), Kimura et al. (US006128258A), Knopp et al. (US005865832A), Getreuer et al. (US006141300A), Saito et al. (US 6137765), Yamakawa et al. (US005963535A), Mochizuki et al. (US006172958B1), and Overbeck (US006201639B1) disclose optical disc drive with inclination angle correction mechanism.

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (703) 605-0756. The examiner can normally be reached on M-F: 7:30 - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8592 for regular communications and (703) 746-8592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Tuan N. Nguyen

November 4, 2002



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